

**REMARKS**

By this Amendment claim 49 is cancelled and claims 1-48 and 50-51 are pending.  
Reconsideration is requested.

**Rejection of Claims 1-51 Under 35 U.S.C. §103(a)**

Claims 1-51 have been rejected under §103(a) as allegedly being unpatentable in view of Watanabe et al., U.S. Patent No. 4,436,428. Applicant traverses.

Applicant first notes that this reference (Watanabe) was initially disclosed via Applicant's IDS submitted on March 7, 2002. In addition, Applicant filed an additional IDS on April 25, 2003 (after the mailing date of the present Office action) which discloses references cited in the pending, corresponding PCT application. Lastly, Applicant is filing a third IDS in conjunction with this response, which IDS discloses references cited in two other related PCT applications. None of the references of record, whether considered independently or in combination, teach or suggest the currently claimed invention.

The present Office action does not set forth a prima facie case of obviousness. Watanabe neither teaches nor suggests, for example, a photoacoustic detector that detects photoacoustic signals. Although Watanabe uses the term photoacoustic spectrometry, rather than detecting an acoustic signal, Watanabe discloses an elaborately constructed fluid flow meter to detect pressure change, *not* a detector capable of detecting an acoustic signal. Specifically, the fluid flow meter of Watanabe detects changes in fluid pressure in the irradiated sample by detecting fluid flow through a tunnel 26 between a sample chamber 22 and a reference chamber 24. (See, e.g., Fig. 1, col. 1, lines 60-67, or col. 4, lines 4-14.) In fact, Watanabe explicitly states that acoustic signals are *not* detected in its method. See, for example, col. 4, line 66 through col. 5, line 5, where Watanabe states:

“An important difference between the present invention and photoacoustic spectrometers of the prior art is the method and apparatus by means of which the oscillatory flow of fluid (gas) between reference and sample chambers 24 and 22 is detected. *Instead of using a microphone (which is sensitive to ambient noise),* a plurality of hot-wire anemometers is used to form a flowmeter element, 28.”

Emphasis added. Watanabe further states that “[a]mbient noise has no effect on this flow detector.” Col. 5, lines, 41-42. Thus, Watanabe in fact teaches away from the presently claimed invention.

For at least the reasons set forth above, the Watanabe reference does not support a case of *prima facie* obviousness and the rejection should be withdrawn.

The application is in condition for allowance. If the Examiner has any further need for response from the Applicant, he is invited to call the undersigned attorney.

Respectfully submitted,

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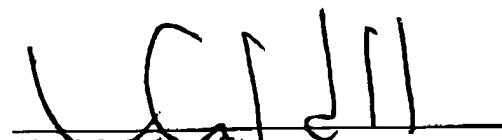
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